144.

UNIVERSITY OF CALIFORNIA
MUSEUM OF VERTEBRATE ZOOLOGY

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Nevada: Clark Co., along Colorado River

1934

Hatfield, D. M.

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Nevada: Clarke Co., along Colorado River
Jan. 9 - Feb. 14, 1934 pp. 1-9, 301-340
#311 - 505

Specimens collected belong to Accession #4282,
and are included in
Bird Catalog #64059-64358
Mammal Catalog #61412-61916
Repl. & Amp. Cat.

For map, see notes of S B Benson and R T Orr for
same trip

tfield - 1934

500 ft., Colorado R., 14 mi. E Searchlight, Clark Co., Nev.

January 9					
	311	♀	Peromyscus	maniculatus	152-68-21-16 18.0 g.
	312	♂	"	"	171-81-21-17 24.6 g.
	313	♂	"	boylei	168-81-19-17 20.0 g.
	314	♂	"	maniculatus	158-70-22-17 19.0 g.
	315	♀	Dipodomys	merriami	243-142-38-13 38.2 g.
	316	♂	Pipilo	aberti	48.5 g.
	317	♀	Phainopepla	nitens	25.0 g.
	318	♂	Spinapicus	varius nuchalis	45.5 g.
	319	♂	Phainopepla	nitens	24.9 g.
January 10	320	♂	Peromyscus	maniculatus	165-74-21-18 24.8 g.
	321	♀	Reithrodontomys	megalotis	148-76-17-15 12.0 g.
	322	♂	Peromyscus	eremicus	180-91-20-17 19.0 g.
January 10	323	♂	"	"	?195-104-21-18 22.5 g.
January 11	324	♀	"	"	187-95-21-19 20.0 g.
	325	♀	"	maniculatus	148-69-20-18 14.7 g.
	326	♂	"	eremicus	192-100-21-18 22.3 g.
	327	♂	"	"	197-99-22-20 22.5 g.
	328	♂	"	maniculatus	145-61-20-17 15.5 g.
	329	♂	Dipodomys	merriami	242-137-38-13 36.6 g.
	330	♂	"	"	237-135-37-14 42.6 g.
	331	♀	Peromyscus	boylei	200-107-21-18 24.5 g.
	332	♂	"	eremicus	195-104-21-19 24.8 g.
	333	♂	"	"	179-87-21-18 22.3 g.
	334	♀	"	"	198-102-20-18 22.6 g.
January 12	335	♂	Dipodomys		37.2 g.
	336	♀	Molospiza		20.0 g.
	337	♂	"		22.0 g.

5700 ft., ~~Co~~ Jap Ranch, 14 mi. E Searchlight, Clark Co., Nev

atfield-1934 500 ft., Colorado R., 14 mi. E Searchlight, Clark Co., Nev.

uary 12	338	♂	Melospiza		18.0 g.
uary 13	339	♀	"		16.0 g.
	340	♂	Colaptes		145.2 g.
	341	♀	~~13~~ Reithrodontomys megalotis	138-69-16-14	7.7 g.
	342	♀	Peromyscus maniculatus	172-75-21-19	22.2 g.
ary 14	343	♂	Perognathus penicillatus	201-106-25-10	22.2 g.
	344	♂	" "	192-98-24-9	20.2 g.
	345	♂	Sylvilagus auduboni	354-35-88-80	757.0 g.
Ranch coll. SBB	346	♂	" "	355-33-83-78	678.9 g.
"	347	♂	" "	341-38-85-78	670.7 g.
Jan. 16	348	♂	Reithrodontomys megalotis	137-70-17-15	8.5 g.
	349	♀	" "	127-65-15-14	7.3 g.
	350	♂	Peromyscus eremicus	192-101-21-19	23.5 g.
	351	♀	" "	98-○-21-19	20.6 g.
	352	♂	Perognathus penicillatus	200-106-26-10	24.4 g.
	353	♀	" "	191-99-25-9	20.2 g.
	354	♂	" "	203-106-26-10	25.7 g.
	355	♀	" "	204-108-27-9	20.8 g.
	356	♂	Dipodomys merriami	251-139-35-14	40.7 g.
	357	♂	" "	244-140-38-14	42.8 g.
	358	♂	" "	225-(124)-38-14	40.5 g.
Jan. 17	359	♀	Neotoma lepida	275-14=31-27	94.0 g.
	360	♂	Peromyscus eremicus	188-95-20-19	26.1 g.
	361	♀	Reithrodontomys megalotis	137-68-17-14	10.0 g.
	362	♀	Onychomys	132-47-20-16	17.0 g.
	363	♂	"	131-45-20-17	17.7 g.
	364	♂	Perognathus penicillatus	201-111-26-9	22.3 g.

379 from Durban Ranch, 14 mi. E. Searchlight, Colorado R., Clark Co., Nevada — —

Colorado R., 31 mi. N, 2½ mi. W Camp Mohave, Mohave Co., A

Hatfield-1934 500 ft., Jap Ranch, 14 mi. E Searchlight, Clark Co., Nev.

17 skel. only	365	♀	Perognathus	penicillatus	221-120-27-10 26.2g.
	366	♀	Spizella		12.3g.
	367	♀	Sialia		26.9g.
	368	♂	"		29.8g.
	369	♀	Bubo	virginianus	890.0g.
January 18	370	♀	Perognathus		183-101-24-9 25.9g.
	371	♀	Reithrodontomys	megalotis	138-71-17-15 10.5g.
Jan. 20	372		Pickup of mountain sheep skull		
	373	♂	Perognathus	formosus	193-109-27-11 13.7g.
	374	♀	Neotoma	lepida	255-116-29-27 67.9g.
coll. D.A. Feathers	375	♀	Ammospermophilus	leucurus	216-66-37-11 103.2g.
Jan. 21	376	?	Dendroica	auduboni.	11.6g.
	377	♀	Vermivora	celata	9.3g.
	378	♀	Turdus	migratorius (coll. D.A. Feathers)	77.2g.
Jan. 23	379	♀	Thomomys	bottae	224-73-28-6 133.5g.
(Arizona)	380	♀	Dipodomys	deserti	336-200-52-18 106.0g.
	381	♀	"	"	293-162-47-15 70.8g.
	382	♀	"	merriami	252-141-38-15 41.4g.
Jan. 24	383	♂	Peromyscus	eremicus	180-94-20-18 22.0g.
	384	♂	"	"	184-98-21-17 20.2g.
	385	♂	"	"	183-99-21-18 20.0g.
	386	♀	"	"	190-101-21-20 23.5g.
	387	♀	"	"	191-107-21-17 17.9g.
	388	♀	"	"	182-98-19-18 18.5g.
	389	♀	"	"	178-97-20-18 17.0g.
	390	♂	Dipodomys	merriami	248-141-38-12 39.2g.
	391	♀	"	"	247-139-37-12 39.2g.

500 ft., Colorado R., ½ mi. N Calif.-Nev. Monument, Clark Co.,

atfield-1934 Colorado R., 31 mi. N, 2½ mi. W Camp Mohave, Mohave Co., Ariz.

Jan. 24	392	♀	Dipodomys merriami	247-148-39-13	38.8g.
Jan. 25	393	♀	Neotoma lepida	288-129-29-28	95.7g
	394	♂	" "	200+-(31)-30-31	141.7g.
			½ mi. N Calif.-Nev. Monument, 500 ft., Clark Co., Nev.		
Jan. 27	395	♂	Dipodomys merriami	239-140-36-12	30.0g.
	396	♀	" "	247-144-39-13	35.2g.
	397	♂	" "	247-146-39-15	37.2g.
	398	♀	" "	233-139-38-14	33.4g.
	399	♂	" "	256-151-39-14	38.2g.
	400	♂	" "	237-137-37-15	36.1g.
	401	♂	Perognathus formosus	176-99-24-11	14.6g.
coll. H.S. Fitch	402	♂	Dipodomys merriami	241-143-38-12	29.4g.
Jan. 28	403	♂	Thomomys bottae	233-74-30-6	165.0g.
	404	♀	" "	219-68-27-6	163.4g.
	405	♀	" "	212-70-27-6	116.7g.
Jan. 29	406	♀	" "	216-61-31-6	149.3g.
	407	♀	" "	209-62-30-6	176.7g.
	408	♀	" "	209-63-29-6	109.3g.
	409	♀	" "	215-65-30-6	116.7g.
	410	♀	" "	209-63-29-6	127.3g.
	411	♂	" "	240-73-31-7	157.2g.
	412	♂	Perognathus formosus	185-104-23-11	14.8g.
Jan. 30	413	♀	Thomomys bottae	198-52-28-6	114.2g.
	414	♀	" "	198-65-27-6	84.3g.
Jan. 31	415	♀	" "	208-65-27-6	210.0g.
	416	♂	Peromyscus maniculatus	180-84-23-17	23.5g.
	417	♂	" "	187-88-21-19	23.0g.
	418	♂	" "	179-89-22-18	23.4g.

...tfield - 1934 500 ft., Colorado R., ½ mi. N Calif.-Nev. Monument, Clark Co., Nev.

	419	♀	Peromyscus maniculatus	163-72-22-18	17.9g.
	420	♀	" "	164-76-21-19	15.1g.
	421	♀	" "	165-75-21-19	19.4g.
	422	♀	" "	169-77-21-18	18.5g.
	423	♂	" "	168-74-22-18	22.0g.
	424	♀	" "	163-72-21-18	17.0g.
	425	♂	Sigmodon hispidus	151-60-22-16	19.0g.
	426	♀	" "	178-76-25-17	33.1g.
	427	♀	" "	271-108-33-20	119.1g.
Feb. 1	428	♀	Peromyscus maniculatus	157-74-20-17	18.1g.
	429	♂	Sigmodon hispidus	184-73-24-18	35.5g.
	430	♂	Perognathus	5.7g.	
	431	?	Reithrodontomys audubonii	13.0g.	
	432	♀	Sialia currucoides	33.5g.	
	433	♂	Oreoscoptes montanus	46.9g.	
	434	♂	" "	42.7g.	
	435	♂	Turdus migratorius	95.0g.	
	436	♀	Sigmodon hispidus	179-76-26-17	34.5g.
Feb. 2	437	♂	Corthylio	6.4g.	
	438	♀	"	5.3g.	
	439	♀	Junco	17.3g.	
	440	♀	Zonotrichia	25.5g.	
	441	♂	Centurus uropygialis	69.6g.	
	442	♂	Turdus migratorius	89.6g.	
	443	♂	Sigmodon hispidus	281-110-32-21	124.7g.
Feb. 3	444	♂	Agelaius phoeniceus	67.8g.	
	445	♂	Porzana carolina	84.5g.	

latfield - 1934 500 ft., Colorado R., ½ mi. N Calif.-Nev. Monument, Clark Co., Nev.

	419	♀	Peromyscus maniculatus	163-72-22-18	17.9g.
	420	♀	" "	164-76-21-19	15.1g.
	421	♀	" "	165-75-21-19	19.4g.
	422	♀	" "	169-77-21-18	18.5g.
	423	♂	" "	168-74-22-18	22.0g.
	424	♀	" "	163-72-21-18	17.0g.
	425	♂	Sigmodon hispidus	151-60-22-16	19.0g.
	426	♀	" "	178-76-25-17	33.1g.
	427	♀	" "	271-108-33-20	119.1g.
Feb. 1	428	♀	Peromyscus maniculatus	157-74-20-17	18.1g.
	429	♂	Sigmodon hispidus	184-73-24-18	35.5g.
	430	♂	Polioptila		5.7g.
	431	?	Dendroica audeboni		13.0g.
	432	♀	Sialia currucoides		33.5g.
	433	♂	Oreoscoptes montanus		46.9g.
	434	♂	" "		42.7g.
	435	♂	Turdus migratorius		95.0g.
	436	♀	Sigmodon hispidus	179-76-26-17	34.5g.
Feb. 2	437	♂	Corthylio		6.4g.
	438	♀	"		5.3g.
	439	♀	Junco		17.3g.
	440	♀	Zonotrichia		25.5g.
	441	♂	Centurus uropygialis		69.6g.
	442	♂	Turdus migratorius		89.6g.
	443	♂	Sigmodon hispidus	281-110-32-21	124.7g.
Feb. 3	444	♂	Agelaius phoeniceus		67.8g.
	445	♂	Porzana carolina		84.5g.

Hatfield-1934 500 ft., Colorado R., ½ mi. N Calif.-Nev. Monument, Clark Co., Nev.

coll. E.R.H.	446	♂	Pipistrellus hesperis	64-26-5-9	3.2g.
" "	✓447	♀	Melospiza		13.9g.
" "	✓448	♂	Dendroica auduboni		11.9g.
" "	✓449	?	Sayornis		22.0g.
" "	✓450	♀	Oreoscoptes montanus		45.5g.
	451	♂	Peromyscus maniculatus	169-81-22-19	23.7g.
	452	♂	"	174-83-22-19	26.0g.
Feb. 4	453	♂	Neotoma lepida	314-194-30-30	129.3g.
	454	♂	Peromyscus eremicus	195-104-20-19	24.0g.
Feb. 5	455	♂	Neotoma lepida	319-194-30-30	159.5g.
	✓456	?	Polioptila		5.3g.
	✓457	♀	Oreoscoptes montanus		48.2g.
	✓458	♀	Turdus migratorius		82.7g.
	✓459	♀	"		81.0g.
	✓460	♀	"		78.7g.
	✓461	♀	"		93.4g.
	✓462	♂	~~Onjaoma~~ Amaiparus		7.3g.
	✓463	♂	Centurus uropygialis		64.4g.
	464	♂	Tadarida mexicana	102-34-10-18, tr. 2.5'	wt. 12.2g.
Feb. 6	✓465	♀	Sayornis nigricans		16.4g.

¼ mi. S Calif.-Nev. Mon., 500 ft. S.B. Co., Calif.

Feb. 7	466	♀	Thomomys bottae	211-63-28-6	129.8g.

½ mi. N. Calif.-Nev. Mon., 500 ft.

	✓467	♀	Zonotrichia	24.5g.
	✓468	♂	"	25.0g.
	✓469	♂	Ash-throated Flycatcher.	25.0g.

Natfield-1934 500 ft., Colorado R., ½ mi. N Calif.-Nev. Monument, Clark Co., Nev.

Feb. 8

470	♀	Thomomys bottae	217-65-29-6	125.7g.
471	♂	" "	254-80-31-7	192.5g.
472	♂	Pyrocephalus		13.0g.
473	♂	Telmatodytes palustris		10.2g.
474	?	Melospiza lincolnii		12.3g.
475	♂	Dermivora celata		7.2g.
476	♂	Melospiza melodia		19.3g.
477	♂	Turdus migratorius		79.6g.

Feb. 9

478	♀	Thomomys bottae	182-55-27-6	61.2g.
479	?	Sayornis sayus		22.2g.
480	♂	Telmatodytes		11.2g.
481	♀	Pipit		19.3g.

Feb. 10

482	♀	Dendroica auduboni		12.5g.
483	♀	Junco		18.4g.
484	♂	"		16.3g.
485	?	Zonotrichia		28.3g.
486	♂	"		25.6g.
487	♀	Thomomys bottae	168-56-26-5	58.5g.
488	♀	" "	208-63-29-6	98.5g.
489	♀	" "	220-71-30-6	126.3g.

2700 ft., 8 mi. S Dead Mtn., Clark Co., Nev.

Feb. 12

490	♀	Peromyscus crinitus	176-91-19-19	19.3g.
491	♂	" "	168-89-19-20	16.5g.

1900 ft., Hiko Spr., 8 mi. SSE Dead Mtn., Clark Co., Nev.
2700 ft., 8 mi. S Dead Mtn., Clark Co., Nev. ——

Hatfield-1934 2700 ft., 8 mi. S Dead Mtn., Clark Co., Nev.

Feb. 12	492	♀	Peromyscus crinitus	177-91-19-20	14.5g.
	493	♂	" "	185-97-19-20	14.7g.
	494	♂	Perognathus	189-104-24-11	16.0g.
	495	♂	"	192-108-24-11	16.9g.
	496	♀	"	163-(85)-23-11	13.3g.
	497	♂	Thomomys bottae	222-80-29-6	101.4g.
	498	♂	" "	195-64-25-6	84.1g.
	499	♂	Neotoma lepida	297-134-30-30	117.4g.
Feb. 13					
	~~494~~				
	500	♂	Citellus leucurus	214-56-36-8	110.0g.
	501	♀	" "	209-63-38-9	96.2g.
	502	♀	Thomomys bottae	203-71-28-6	93.5g
to Spring	503	♂	Calypte costae	no weight.	
skel only	504	♂	Oreoscoptes montanus	40.7g.	
	505	♀	Thomomys bottae	197-62-28-6	84.0g.

MUSEUM OF VERTEBRATE ZOOLOGY — ***CENSUS SHEET*** a

Locality 500+ft., 13 mi. SE Searchlight, Clark Co., Nev.

Date January 12, 1934

Observer D. M. Hatfield

Time in field 9 AM - 1 PM

Approximate no. miles 5 mi.

Nature of route (zone, fauna, associations)

9-11 - in arrow-weed

11-12 - in mesquite and arrow-weed

12-1 - in arrow-weed

Weather Clear

Species — Hours →						Totals
Phainopepla nitens	8					8
Lophortyx gambeli	9	3	4			17
Pipilo aberti	4	4	2	3		13
Wren	1	1				2
Auriparus flaviceps		3				3
Song sparrow		4	3	6		13
Sage sparrow		3	4			7
Sparrow		10	2			11
Hylocitates scalaris cactophilus	1	1				2
Sayornis sayus				1		1
Unknown	5	4	4			15
TOTALS (hourly and grand)	29	34	19	10		92

500+ ft., Colorado R., 14 mi. SE Searchlight, Clark Co., Nev.
January 8, 1934

Left Berkeley January 6, in company with H.S. Fitch, D.A. Feathers, S.B. Benson in charge. Left at 11 A.M., and drove through Bakersfield and over the Tehachapi Pass, spending the night 2½ mi. E Mohave. Ate breakfast in Mohave, and drove through to Needles. During the early part of the day (Jan. 7), the drive was made through portions of the desert abounding in Yucca ~~to~~ mohavensis. Saw several ravens, and several "hawks", but none close enough to shoot. During the afternoon saw much Yucca brevifolia. Camped for the night about 1½ mi. S Needles. The next morning (Jan. 8) drove into Needles for breakfast and spent some time there purchasing supplies. Saw several Brewer blackbirds and numerous English sparrows. From Needles drove to present camp. En route drove through localized areas of Yucca mohavensis and Yucca brevifolia, with prickly pear and barrel cactus present everywhere. Stopped at Searchlight on the way, and then drove down to the ~~river~~ Colorado River bottom on the west side of the river about 2½ to 3 miles south of Brown's ferry. Stopped first

atfield 1934

500+ ft., Colorado R., 1¼ mi. SE Searchlight, 302
Clark Co., Nev.

January 8, 1934

at the Durkin Ranch to inquire as to suitable camping place. Saw a Gambel white crowned sparrow there. Were directed to the Updyke Ranch about 1½ south of Durkin's, and from there drove still farther (about a mile) south and east to the present camp, directly on the river. Set out 50 traps in the arrowweed tonight, and heard quail going to roost, but was unable to see them because of the dark.

January 9, 1934

Caught in traps —

3 Peromyscus maniculatus
2 " eremicus
1 Dipodomys merriami
1 Pipilo alberti

One of the P. eremicus was badly chewed and unsuitable ~~as~~ for mounting.

The traps were set in an area densely overgrown with arrow-weed. The soil was cracked and dry, evidently having been previously flooded. The P. eremicus were both caught under two solitary mesquite trees; the P. maniculatus under dense arrowweed, and the D. merriami in an open sandy spot.

During the day saw several Abert towhees, 4 Phainopeplas, 2 wrens, a red-naped sapsucker, and a song sparrow.

atfield - 1934

500+ ft., Colorado R., 1¼ mi. SE Searchlight, Clark Co., Nev. 303

January 9, 1934

Set out 100 traps in the evening. 50 of these were set in very dense arrowweed, so dense that it was often necessary to crawl on hands and knees to progress. The other 50 traps were set in more open sandy country, often overgrown with dry grass, but always with arrow-weed the dominant plant.

January 10, 1934.

Caught in traps —

2 Dipodomys
1 Reithrodontomys
4 Peromyscus manniculatus
5 P. eremicus
1 P. boylei

The Reithrodontomys was caught in a grassy, fairly open area surrounded by large clumps of arrow-weed and mesquite.

In the morning, shot a male and female Phainopepla nitens. This species seems to be localized in a very definite area just ½ mile north of camp. There there is an open, sparsely overgrown area which is of some what higher elevation than the surrounding territory, and these birds seem to

500+ ft., Colorado R., 1¼ mi. SE Searchlight, Clark Co. Nev.

January 10, 1934.

be restricted to this area.

Saw a red-shafted flicker this afternoon, but was unable to get a shot at it. Also saw several verdins, all in mesquite or high arrow-weed.

One is struck by the apparent paucity in numbers of species of birds present now.

Watched a flock of 16 quail go to roost tonight. Perhaps it would be better to call them two flocks, because 5 came in from a north-easterly direction and 11 from the western side. They started flying toward the roosting place, an old dead, partly fallen cottonwood, at 5:12 PM, and by 5:20 all of them were at roost. They made much noise in getting settled, but were quiet soon after. They called back and forth when flying in, and about 20 yards from the roost, set their wings and glided in.

Ran same trap-line as on Jan. 9.

January 11, 1934

Catch in 100 traps -

2 Dipodomys merriami
4 Peromyscus eremicus?

This catch seems very poor for a line of 100 traps. At first glance it might seem that

Hatfield-1934

500+ft., Coloracda R., 1¼ mi. SE
Searchlight, Clark Co., Nev.

January 11, 1934

The majority of animals had been trapped out the night before, since the line had been left in exactly the same place. However, this seems rather improbable, except perhaps within a small radius of each trap.

The mammals caught were trapped in the same types of environment as the night before, the D. merriami in an open sandy spot, and the Peromyscus eremicus under dense arrow-weed. Four traps in one grassy area under mesquite were set off, probably by cottontail rabbits, since droppings were present all around, and their tracks were seen everywhere. Incidentally, all the oatmeal was gone from these sprung traps. Set no traps, will shoot birds tomorrow.

January 12, 1934

Started out at 9 AM with H.S. Fitch, taking census sheets along. Shot cactus woodpecker, 3 Melospiza melodia fallax(?), and 2 Melospiza melodia saltonis(?), one ♀ Gambel quail, and one Abert's towhee.

The song sparrows and towhee were shot at a small waterhole as they came to drink. The sparrows were remarkably tame, merely fluttering into the bushes beside

atfield-1934

500+ ft., Colorado R., 1¼ mi. S/E
Searchlight, Clark Co., Nev.

January 12, 1934.

the waterhole after each shot, and coming back to drink within a minute or less. Often they came out into the open to drink when I was less than 10 feet away. These birds are very shy when in brush, and it seems to me that this tameness around water indicates the great extent to which song sparrows depend upon water.

I saw a Say phoebe in this same area, but it flew off beyond gunshot.

Set 50 traps in arrow-weed and quail brush association, with intermingled areas of rye-grass.

January 13, 1934

Caught in traps —

2 Dipodomys merriami
1 Peromyscus maniculatus
1 Reithrodontomys megalotis

The Reithro was caught on the edge of a patch of rye-grass under some quail brush.

Went out hunting later, and saw 2 gnat catchers, 1 kinglet, 3 verdins, 1 Crissal thrasher, 8 Abert towhees, 12 song sparrows, 3 Phainopeplas.

Shot a red-shafted flicker in a

Saltfield-1934 500+ ft., Colorado R., 1¼ mi. SE 307
Searchlight, Clark Co., Nev.

January 13, 1934

willow stump along the river bank.
While I was watching the activities of a kinglet in a cottonwood a short distance from the river bank, I heard a loud splash, followed by 3 or 4 sharp slapping sounds. I immediately ran to the bank, but nothing was to be seen. Found some fairly fresh beaver cuttings near this place, so it is possible that I heard a beaver. However I am skeptical that a beaver could make so much noise.

Tonight set traps in association about quail brush. This association is made up of a fleshy-leaved plant (#1 of botanical spec.) that appears to belong to the Chenopodiaceae. The association ends at the creosote bush. Set 50 traps, and, from the appearance of the trapping ground, expect to catch little beside Dipodomys. Saw several sage sparrows and 3 song sparrows in this association.

Also saw numerous road-runner and coyote tracks, and small dust baths which road runners evidently use. Scared up a jack rabbit, but was unable to

Hatfield-1934

500+ ft., Colorado R., 1¼ mi. SE 108
Searchlight, Clark Co., Nev.

January 13, 1934.

get a shot at it. Shot a cottontail rabbit (Sylvilagus a. audubonii?)

January 14, 1934

Caught in traps—

9 Dipodomys merriami
2 Perognathus penicillatus
2 Peromyscus maniculatus.

A coyote had been around nearly all my traps, but strangely enough, touched none of my traps.

Saw numerous sage sparrows and two Bewick wrens in a clump of mesquite but was unable to get a shot at the latter. At 7:30 AM saw two red-tail hawks flap-gliding from the river-bottom toward the western hills. The sun was not yet high enough to support them in full gliding flight.

Saw a sage sparrow drinking on the bank of the river. The water was running fairly swiftly here, and the only way the bird could reach the water was by way of a fallen tree which extended into the swift water. Again I noted the extra-ordinary tameness of the bird when

Jap Ranch, Colorado R., 1½ mi. SE Searchlight, 500+ ft., Clark Co., Nev.

drinking.

Moved camp to "Jap ranch", about a mile + a half below the last camp.

Saw two Say phoebes, numerous song and sage sparrows and Abert towhees at new camp.

Set out 58 traps tonight in same association as last night. Saw great horned owl in dead mesquite tree. It allowed me to approach within 50 feet of it before flying away. Heard what was very likely the same individual calling about 2 A.M. Heard a screech owl about an hour later, but it was quiet after about 10 minutes of calling.

January 15, 1934

Caught in traps -

10 Dipodomys merriami

My traps were set last night when it was practically dark, and consequently I was unable to pick out varied areas in which to set traps. Perhaps for this reason my catch consisted only of D. merriami since Fitch, running a trapline in a slightly different direction and in

Sap Ranch, Colorado R., 1¼ mi. SE Searchlight, 310
500+ ft., Clark Co., Nev.

January 15, 1934

different types of habitat, caught Onychomys and Peromyscus also. Since we have a series of D. merriami, it was not deemed necessary to put up anymore as specimens, though I shall perhaps put up 6 or so from this locality.

Saw a sparrow hawk flapping upwind this afternoon, and some sage sparrows nearby set up a great hue + cry until it was out of sight, when they quieted down.

Shot a savannah? sparrow this evening.

Set out 100 traps in association above quail brush.

Tonight noted that some bats were flying into one of the outhouses here on the ranch. On further investigation these proved to be leaf-nosed bats (Macrotus). We obtained several individuals by catching them with our hands. After securing a sufficient number for specimens, we observed some of their habits. They fly with a relatively slow wing beat, and, when "hanging up", they make a half-turn roll thus:

Hatfield-1934 Jap Ranch, Colorado R., 1¾ mi. SE Searchlight, Clark Co. Nev.

January 15, 1934.

It has been supposed that these bats bring their food into such places so as not to have to eat it on the fly. However, in this case we observed no food except a few fragments of chitin of insects. When dissected, the bats' stomachs were found to be very full, so it seems strongly probable that they eat on the fly, literally gorging themselves, and then roost in some sheltered place to digest their food.

These bats have relatively large eyes for Chiroptera, and seem to put them to more use than do various other bats such as Pipistrellus and Myotis. Macrotus moves its head around in a very characteristic way, emphasizing the contraction of the back muscles, and pulling the head far back. Its ears when at rest are normally directed straight down, but when an individual is disturbed, its ears are brought into full play, being extended ~~perpendicularly~~ vertically to the body.

These bats, in so far as known, make no noises, vocal or otherwise, even when captured. They will bite, but very seldom. Saved one individual alive.

Jap Ranch, Colorado R., 1½ mi SE Searchlight 500+ ft., Clark Co., Nev.

January 16, 1934

Caught in traps -

22 Dipodomys merriami

9 ♂♂

13 ♀♀ - one with 2x12mm. embryos.

2 Reithrodontomys megalotis

4 Peromyscus eremicus

7½ Perognathus penicillatus (two badly eaten by Onychomys.)

Left trapline out all day in hopes of catching Ammospermophilus but had no luck. Heard one Ammo about sundown, but was unable to run it down.

Let Macrotis specimen go tonight after tattooing its left ear with ink.

Ran same 100 traps.

January 17, 1934

Caught in traps

2 Reithrodontomys megalotis

3 Onychomys

2 Peromyscus eremicus

1 Perognathus penicillatus

13 Dipodomys merriami

6 ♂♂

7 ♀♀ - one with 2x15 mm. emb.

1 Neotoma lepida

Hatfield-1934

Jap Ranch, Colorado R., 1¼ mi. S E
Searchlight, 500+ ft., Clark Co., Nev.

January 17, 1934

This catch, it seems to me, is phenomenal for a second night's run at the same trap line. Logically, since many of the Dipodomys have been trapped out, one would expect something of the kind, but hardly on such a large scale. To determine the extent of the mammal population, I shall leave the same 100 traps out a third night.

Saw a flock of 7 or 8 mountain bluebirds this morning, and Fitch shot one for identification. In the afternoon Fitch and I were out hunting and saw another flock out on a grassy field near the ranch. They perched on dead weeds and on small mesquite bushes in the middle of the field, and were fairly tame. The wind was blowing somewhat and we saw one of the birds fluttering stationary in the wind, as a sparrow hawk is wont to do. Later we each shot a chipping sparrow from a flock of 4 or 5 on the edge of the same field. They were perched in a mesquite tree. A few minutes later we saw a flock of 6 or 7 western Mexican bluebirds and obtained 3, one male and two females

Hatfield-1934 — Jap Ranch, Colorado R., 1½ mi. SE — 314
Searchlight, 500+ ft., ~~Colorado~~ Clark Co., Nev.

we wounded another male, but could not find it in the thick brush.

On returning to camp, we saw a flock of Audubon warblers in a cottonwood tree. Fitch shot one for identification.

Later Fitch and I went up onto the ~~second~~ first bottom of the river. Here we saw no birds at all, nor any Ammospermophilus.

Tonight (8 P.M.) all of the party went over to a grove of cottonwoods, where Fitch and I had seen two horned owls earlier in the day, and employed a rather unique technique to obtain them both. Fitch is adept at imitating a wounded and dying rabbit, and we used his persuasive powers to call both owls into gunshot distance. The two birds were paired, a male and female. The male was called up first. He alighted in a cottonwood about 80 feet from the party and uttered a few ~~very~~ deep, guttural notes. Later the female was called up into a cottonwood about 200 yards from where the male was obtained. She

Hatfield-1934

Jap Ranch, Colorado R., 1¼ mi. SE
Searchlight, 500+ ft, Clark Co., Nev.

January 17, 1934

uttered no call notes at all, and alighted very clumsily, knocking down many leaves and making quite a bit of noise for a bird supposedly a night predator. When I skinned it out I found numerous burrs deeply embedded in the feathers. Weeds containing these burrs are rather common here, so it would seem probable that it got them when procuring prey on the ground.

January 18, 1934

Caught in traps —

1 Reithrodontomys megalotis
2 Peromyscus eremicus
1 Perognathus penicillatus
13 Dipodomys merriami
9 males
4 females, one with one 11 mm. emb.

It is perhaps notable that in the three nights of trapping there ~~predominance of~~ has been a reversal in predominance of sex caught as regards D. merriami. The first night with a trapline of 100 traps, the ratio of males to females

Hatfield-1934

Jap Ranch, Colorado R., 1½ mi. SE Searchlight, 500+ ft., Clark Co., Nev.

January 18, 1934

was 9 to 13. The second night the ratio of males to females was 6 to 7½. However, on the third night, the ratio was 9 males to 4 females. Now, perhaps, as has been suggested to me, this was merely an example of the working of the law of averages, However, it seems to me ~~to~~ show something more; that, since the females were caught first, they may be considered to be more active than the males.

Took up traps in the morning.
Set 50 traps in creosote association.

January 19, 1934.

Caught in traps—

12 Dipodomys merriami

7 ♂♂

5 ♀♀ - Two with 1 x 14 mm. embryos.

Left traps out.
Went for water in the morning.
Hunted during the afternoon. Went up onto ~~second~~ first bottom of river. Walked approximately 2 miles toward the mountains on the west side of the river. The entire time saw only one verdin, and ~~I~~ shot that. It is surprising how barren

Hatfield-1934

Jap Ranch, Colorado R., 1½ mi. SE.
Searchlight, 500+ ft., Clark Co., Nev.

January 19, 1934

of bird life this area is. Came back to camp and then hunted in cottonwoods along a dry slough just east of camp.

Shot a gilded? flicker

Saw a red-naped sapsucker, two ~~black-tailed~~? gnatcatchers, numerous phainopeplas, a hawk.

Set 50 traps on second bottom, so now have 100 traps out, 50 on first bottom, 50 on second bottom.

January 20, 1934

Caught in traps -

2 D. merriami

2 ♂; 1 ♀

These were both caught on the first bottom, in the 50 traps left out for the second night.

1 Perognathus formosus

1 Neotoma lepida

These were caught on the ~~second~~ first bottom, to be designated as "mesa" from now on. There were many holes, but most of these had debris in them or were covered with spider-webs. It seems probable that P. formosus is hibernating now,

Jap Ranch, Colorado R., 1¼ mi. SE Searchlight, 3000+ ft., Clark Co., Nev.

January 20, 1934.

and that the specimens obtained were exceptional.

Took all traps in.

Went hunting in afternoon with Fitch. I shot a lutescent warbler and Fitch shot a pipit. Saw 2 red-tailed hawks, a Cooper or sharp-shinned hawk, a cactus wood pecker, a red-naped sapsucker, a flicker, ruby-crowned kinglet(?).

Put out 100 traps on mesa tonight. Found a badger burrow near end of trapline. Found feces at entrance.

January 21, 1934

Caught in traps —

Nothing —

Now I am more certain that, either Perognathus formosus is hibernating or some disease has killed off most individuals. Fitch had 50 traps out along the base of the mesa, and 100 traps on top of the mesa, and caught one wood-rat, so for 250 traps, the sum total of the catch was one wood-rat, rather poor trapping. There were plenty of small holes, and some about the size

latfield-1934

Jap Ranch, Colorado R., 14 mi. SE
Searchlight, 500+ ft., Clark Co., Nev.

January 21, 1934.

of kangaroo rat burrow entrances.

Put up the lutescent warbler this morning and shot an Audubon warbler, which I also put up.

Benson and I then went north toward the Updyke Ranch and I collected specimens of each of the dominant plants composing the various associations in sequence, from creosote to arrow-weed. Benson took pictures of each association. Then we went to the Durban Ranch farther north and set 10 sets of gopher traps, totalling 22 traps. Also got some water for camp purposes.

Tonight I put up a robin shot by D. A. Feathers.

Heard a coyote yipping a few hundred ~~yards~~ yards from camp.

Spent some time during evening getting ready to move tomorrow.

January 22, 1934

Went up to Durban Ranch early in morning and pulled in gopher sets. Caught only one out of ten sets. Left Jap Ranch about 10:00 AM and

Hatfield-1934

320

Colorado R., 31 mi. N, 2½ mi. W
Camp Mohave, Mohave Co., Ariz.

January 22, 1934

drove up to Searchlight for mail and supplies. Ate noon meal there and then drove down to Browns ferry. On way saw two shrikes and a cactus woodpecker. Crossed ferry (for $2.50) and drove south along river for about 1½ miles. Camped about 200 yards from the river bank in creosote and Atriplex association. There are numerous small sand dunes near camp.

Went down to river bank and looked at beaver workings. There is a rather dense growth of young willows along the bank, and the beavers are working from the south end of the grove toward the north. They have downed about 50 yards of the growth at the south end of the grove. Some trees 2 in. in diameter have been cut down with 2 or 3 bites. Saw a road-runner about 100 yards from camp.

Set out 100 mouse traps in sand, and 12 rat traps on the dunes at the entrances of Dipodomys deserti burrows.

Hatfield-1934 Colorado R., 31 mi. N, 2½ mi. W 321
Camp Mohave, Mohave Co., Ariz.

January 22, 1934

Saw a D. deserti individual come out of his burrow. I had a mouse trap set there, and he set it off. It smacked him on the nose, and, after one or two preliminary hops, he dodged down his burrow.

January 23, 1934

Caught in traps-
7 Dipodomys merriami
3 " deserti

One of the D. deserti, a young individual, was caught in a mouse trap.

Spent the morning skinning rats and then went with Benson up onto the mesa to sight on Mt. Davis, Dead Mt., etc., and determine our present position. Spent 3½ hrs. of afternoon getting truck out of sand. Hunting was bad since there was a strong wind blowing. Tonight set out 100 traps in arrowweed and quail brush.

This morning I was awakened by the swishing of the wings of two ravens flying low over camp.

Colorado R., 31 mi. N., 2½ mi. W
Camp Mohave, Mohave Co., Ariz.

January 24, 1934

Caught in traps —
3 Dipodomys merriami
8 Perognathus eremicus

Spent the morning putting up the 3 D. merriami and 7 of the P. eremicus. The wind was blowing very hard all afternoon, so the hunting was bad. Saw an ~~owl~~ Albert towhee, a cottontail rabbit, and late in the afternoon I happened on a grey fox in the grass. It ran straight away from me, too rapidly to allow my getting a shot at it.

Tonight set out 50 traps along bank of river among relatively large willows.

January 25, 1934

Caught in traps — nothing. This, at first sight, seems rather peculiar, since back away from the river only a short distance (in arrow-weed) the members of the party caught P. eremicus and D. merriami. The 50 traps were set out in the hopes of catching Perognathus boylii, as some were caught across the river in practically the same kind of association.

Fatfield-1934

Colorado R., 31 mi. N., 2½ mi. W 323
Camp Mohave, Mohave Co., Ariz.

January 25, 1934

The lack? of mice may perhaps be accounted for by the fact that there are numerous predators present. The first night here we heard horned owls hooting in this general area, and I have seen very many tracks of mammals such as ~~fox~~ fox, skunk and coyote.

Saw the? two ravens again this morning, also a robin and one Abert towhee.

Fitch caught 6 woodrats (N. lepida and N. albigula) which I helped him put up in the morning. Moved camp, leaving about 11 A.M. We were 1.3 mi. south of Brown's ferry. Saw a roadrunner on the way to the ferry.

Just after leaving the ferry on the Nevada side, saw a shrike and a cactus woodpecker. Stopped on way to Searchlight to take pictures of a pure stand of Opuntia. Saw a wood-rat nest in a cholla bush.

Got mail in Searchlight, then drove to Needles for supplies. Spent night 2 mi. north of Needles.

Lattfield-1934 Colorado R., ½ mi. N Calif.-Nev. Monument, 500 ft., Clark Co., Nev.

January 26, 1934

Drove north of Needles on river road. Spent morning looking for campsite. Saw two marsh-hawks over sloughs on way north. At present camp have seen vermilion flycatcher, black phoebe, and heard horned owl. We are camped on mesa directly above a swamp about 2-3 miles north of the state line.

Set out 75 traps on mesa. There are numerous burrow entrances present here.

January 27, 1934

Caught in traps —

10 Dipodomys merriami

1 Perognathus formosus

Spent morning plotting locality with Benson and putting up 7 D. merriami and the pocket mouse.

Afternoon put out 9 gopher sets (19 traps) and observed birds. I found that the gopher diggings vary considerably in different types of ground. Along the shore of the slough, where the ground is fairly damp, the is a heavy growth of dry grass. The roots of this grass are embedded in a very

Hatfield-1934

Colo. R., ½ mi N Calif-Nev Monument, 500 ft., Clark Co., Nev.

January 27, 1934

compact layer of brown clay about 2½ in. thick. Under this layer there is a thick layer of coarse sand. Between the clay and sand the gophers make their burrows. Higher up, about 50 feet from the slough bank, the gophers go much deeper, often 1½ to 2 feet below the surface.

While setting traps, saw a flock of 5 or 6 green-winged teal, feeding in shallow water, with head under and tail pointing upward. Saw a flock of 15 mudhens in the same place. Other birds seen — gilded flicker, cactus woodpecker, sparrow-hawk (female), red-tailed hawk, some sort of sandpiper, a vermilion flycatcher, and a Bewick wren. Heard a screech-owl out over the marsh.

January 28, 1934

Caught in gopher traps — 1♂, 2♀♀.
Changed sets to north of camp, made 13 sets (26 traps.)

Put up 3 gophers caught in morning.

Ran traps in afternoon, had caught 7. Changed several sets, and left all traps out.

While going over traps, saw following birds — blue-gray gnatcatcher, verdin,

Hatfield-1934

Colo. R. 1/2 mi. N Calif-Nev. Monument
550 ft., Clark Co., Nev..

January 28, 1934

western robin, great blue heron, Phainopepla, marsh wren, house wren, cactus woodpecker, gilded flicker, 2 shoveller ducks, and an Albert towhee.

Set out 75 mouse traps on mesa, primarily in hopes of catching Perognathus

January 29, 1934

Caught in mouse traps —
1 Perognathus fallmosus
10 Dipodomys merriami
Caught in gopher traps —
1 male.

Reset all setting of gopher traps

Birds seen while making resets —
Sage thrasher, western robin, verdin, white-crowned sparrow, great blue heron, mud-hen, and Phainopepla.

Spent most of day putting up gophers, and in evening went over line again. Had caught two, both young and one alive. Placed the live one, a female sub-adult, in a cardboard box for further observation. It was very active, and extremely vicious. It had been caught by the right hind leg, and, when greatly excited, persisted in biting that leg, crunching the bones of the foot until the blood flowed freely.

Hatfield-1934

Colo. R., ½ mi. N Calif.-Nev. Monument, 500 ft., Clark Co., Nev.

January 30, 1934

Caught in gopher traps – nothing –
Took up all traps, and made 7 sets along bank of slough south of camp. Put up two gophers caught yesterday, and then this afternoon took 70 traps and went over onto island east of camp to make sets for Sigmodon. Set traps across island from east to west. Started at arrow-weed on east side and set a line toward the west. Found no signs of Sigmodon except on extreme west side of island, in grassy areas.

January 31, 1934

Caught in gopher settings, – one female.
Took up gopher traps.
Caught in mouse traps – 4 Peromyscus maniculatus
These were caught along the west edge of the island, none on the interior of the area.
Set out 22 rat-traps where Sigmodon signs were abundant. This took until 10:00 A.M. Skinned out and put up the gopher and 4 Peromyscus maniculatus until 3:30 P.M. Then went out and ran trapline again. Caught one ♀ adult and 2 young Sigmodons.

atfield-1934 Colo. R., ½ mi. N Calif.-Nev. Monument, 500 ft., Clark Co., Nev.

February 1, 1934

Caught in traps -

1 Sigmodon hispidus (gg)
1 Peromyscus maniculatus

Put these two up and then blew skulls. After this, went out hunting birds. Shot gnatcatcher, Audubon warbler, mountain bluebird, 2 sage thrashers, robin. Got back to camp about noon. Put up all but the robin in the afternoon. At 4:00 P.M. went over trap-line again. Had caught 2 adult Sigmodons and one young. The young individual was caught in a small grass "island" (surrounded by water). We caught 4 young in this same area, seeming to indicate the presence of a nest.

Put up the robin and the young Sigmodon after dinner tonight.

February 2, 1934

Caught in traps -

1 Sora rail
1 Sigmodon hispidus
1 Reithrodontomys

After going over traps, Fitch and I started north on the island, primarily to look for new colonies of cotton rats, and incidentally to hunt birds. We walked about

Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

February 2, 1934

two miles north by airline, exploring the edges of the sloughs on the west side of the island, but could find no cotton rat sign whatever.

I shot two ruby-crowned kinglets, a junco, a Gambel white-crowned sparrow, a gila woodpecker, a red-winged blackbird, and a robin. Saw in addition— a great horned owl, a red-tailed hawk, a great blue heron, a Cusial thrasher, a pipit, a flock of mountain bluebirds, a sage thrasher, an Audubon warbler, a myrtle warbler, gilded flicker, and a kingbird.

The birds are scarce out on the middle of the island, most of them staying close to the slough on the western side.

Got back to camp about noon and put up several birds and a cotton rat. At 5:00 P.M. went over trap-line again, but caught nothing except an Abert towhee. Three traps were sprung, but not where there were good cotton rat signs, so it seems likely that we have trapped out the greater part of the colony. Will probably pull traps in tomorrow morning.

Hatfield-1934 Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev

February 2, 1934

It seems peculiar that Sigmodon should be so localized here. Undoubtedly there are other colonies about, but so far we have discovered none.

February 3, 1934

Spent morning putting up birds. At 2 P.M. went over trap-line, taking in traps. The catch consisted of 3 Peromyscus maniculatus, 1 Reithrodontomys, 1 mouse wren, and 2 Lincoln sparrows. Put up two P. maniculatus, but the birds were spoiled. Tonight put out 10 rat traps in hopes of catching Neotoma albigula.

February 4, 1934

Caught in traps -
One Neotoma lepida
" Peromyscus crinitus

Put up the two mammals this morning. Sick most of the day. Late in afternoon, about 5:00 P.M., noted numbers of bats flying. The wind came up about 5:30, and within 10 minutes there were no bats to be seen.

Set out no traps tonight, except one left at entrance of Neotoma burrow last night.

Latfield-1934 Colo. R., ½ mi. N. Calif.-Nev. Monument, 500 ft., Clark Co., Nev.

February 5, 1934

Caught one Neotoma lepida in trap left out.

Went out hunting birds in morning. Shot 4 robins, one sage thrasher, one gnatcatcher.

Spent afternoon putting up specimens.

February 6, 1934

Put out 12 gopher sets (20 traps) in morning, mostly in California. There were very few fresh mounds, and most of these were in loose sand.

Went over trap-line at 4:30 P.M. Had caught one gopher, a female, caught in California, ¼ mi. S Calif.-Nev.-Mon. Shot a black phoebe, and saw a kingbird and an ash-throated fly-catcher. Saw a group of 4 Ammospermophiles in a small ravine near camp.

Spent most of afternoon in camp, since Fitch and Orr had gone up to Hat Spring, and Feathers was running his trap-line.

February 7, 1934

Caught in gopher traps- nothing. Took in all traps. Gophers seem to be scarce to the south of camp, and since we have a record of this parti-

Hatfield-1934 Colo. R., ½ mi. N Calif.-Nev. Monument, 500 ft., Clark Co., Nev.

February 7, 1934

cular series, for California, it seems a waste of time to leave a trapline out for one gopher a day.

Shot an ash-throated flycatcher and two white-crowned sparrows. Saw four western gnatcatchers, three verdins, and 2 saltonis song sparrows.

Drove the truck to town for supplies in afternoon. Got back in time to set out [redacted] gopher sets north of camp, ([redacted] traps).

Saw two Abert towhees, a jay of the genus Aphelocoma, probably woodhousei, a sparrow hawk, a red-tailed hawk, marsh wren, house wren, junco, mudhen, great-horned owl, and Crissal thrashers. Got just a glimpse of two muskrats along the edge of the slough, but was unable to get a shot at them. Heard a screech-owl, but was not able to locate it, though I did succeed in calling it somewhat closer by imitating it.

Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

February 8, 1934

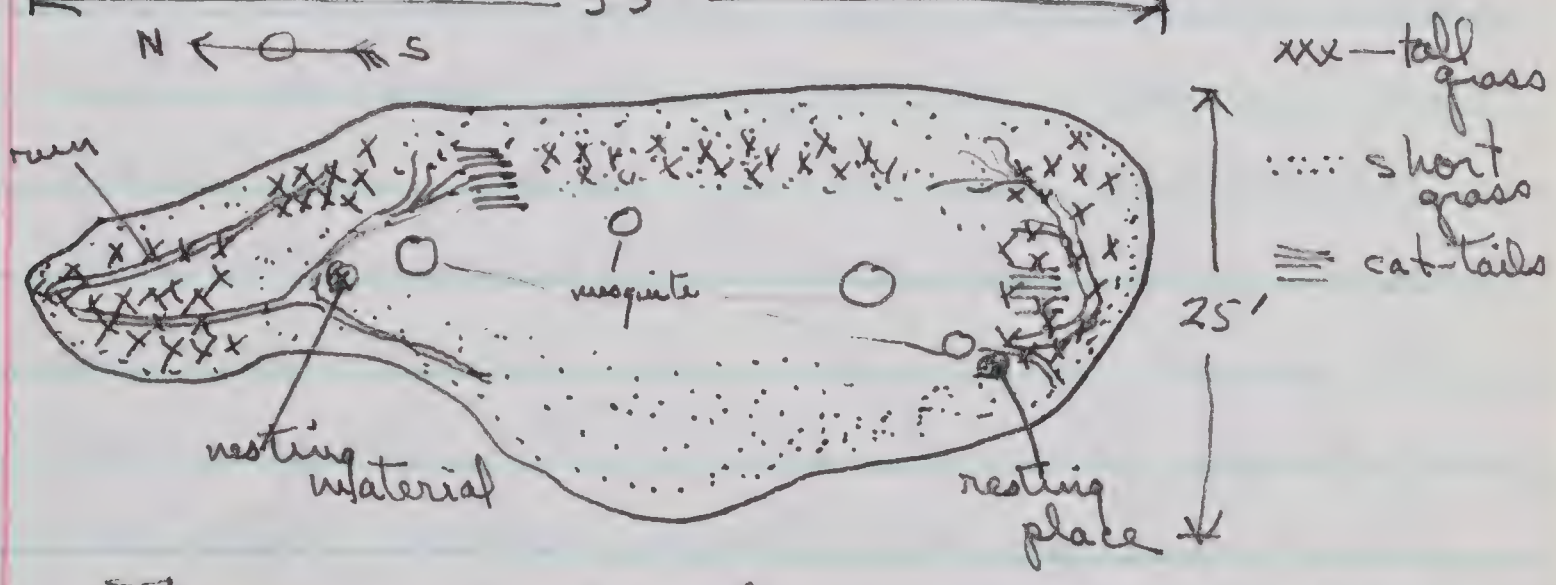
Caught in gopher sets -
One male
One female

Spent some time during morning changing sets and setting rest of traps.

Shot a vermilion flycatcher

In the afternoon Fitch and I went over to the island in an attempt to study the habitat of Sigmodon.

We chose an area 55 ft. x 25 ft. for intensive study.



The area contained a varied plant cover; tall grass, short grass, cat-tails, and mesquite We started in by going over the ground thoroughly following out what well-developed runways were present, and looking for any signs of nests.

The well-defined runways were largely confined to tall grass areas, petering out

Hatfield-1934

Colo. R., ½ mi. N. Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

February 8, 1934.

and branching in all directions when they reached short grass or barren mud flats. The rats are apparently not at all averse to running through water, since some of the runways were under an inch of water in some places. One which we followed out was situated so that it was broken by a small stream, though the water was only about an inch deep.

In one tall grass area we found that the rats had cut all the stems just above the ground, laying the grass as though with a mower. However, in another place, they had packed down a layer of grass to run upon. Perhaps it is of significance that in the latter area the ground was damper, often under water.

In several instances runways were traceable to the edge of a tall grass area, where they would end abruptly, the water being 3 or 4 inches deep beyond. There is little doubt that such runways are in constant use, since fresh droppings and grass cuttings were present in them.

Hatfield-1934 Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

February 8, 1934

The runways are 8 cms. wide, on an average, where they are evident.

We found only two evidences, that is to say, definite evidence, of nests or places in which the rats might rest. The nesting material (indicated on the map, p. 335) was found loose and somewhat scattered through dead and fallen arrow-weed stalks. Since its disintegrated state was, to my knowledge, not due to human agency, it seems evident either that some carnivore pulled it out or that the rats themselves disposed of it when it was no longer in use. Since 4 young were caught in the tall grass area just to the north of the nesting material, ~~I would be inclined to believe that~~ and since the general area around this material was so overgrown as to make it difficult for a small carnivore ~~to~~ get at any nest, I would be inclined to believe that the latter theory was the more probable. However, we found no definite nest-site. The possibility has been suggested that this was a nest of Reithrodontomys

Hatfield-1934

Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

February 8, 1934

But, ~~in~~ in my experience, nests of harvest mice are much smaller and more compact.

The area indicated on the map as "resting place" was a well-defined open space in the midst of a very thick clump of tall grass. It was about 12 in. in diameter, and had several runs leading into it. Its floor was covered with a layer of long grass stems neatly arranged. When I lifted this layer up I found numerous droppings underneath it, indicating that the rats had spent some time ~~there~~.

It seems to me that these cotton rats are more localized than Microtus, being on the average more abundant per unit area. They do not have definite runs from one "island" of mesquite and tall grass to another, and it seems probable that they spend most of their time, most of their lives, even, in one such island.

For additional information, see notebook of H. S. Fitch for the same date.

Hatfield-1934 Colo. R. ½ mi. N Calif.-Nev. monument, 500 ft., Clark Co., Nev.

February 9, 1934

Caught in traps —
One immature gopher.

The gopher population seems to have been reduced.

Changed most of sets in morning to what appeared to be fresh workings. However, it is rather difficult to tell whether or not workings are fresh, since some which were fresh 2 weeks ago appear exactly the same now.

Shot a Say Phoebe and 3 Zonotrichias, all gambeli, from 3 different flocks. In afternoon went hunting on the island. Shot an Audubon warbler, 2 juncos, a pipit, a marsh wren.

In afternoon, late, went to agricultural experiment station 7 miles north of camp to look for Neotoma albigula. We had been told by Snyder, an Indian here, that there are two kinds of woodrats, large and small, and that the Indians have a name for each. The large ones, he said, were found near this experiment station. Fitch and I went up there, but found no signs at all of Neotoma. There were many fresh gopher mounds around.

Colo. R., ½ mi. N. Calif-Nev.
Monument, 500 ft., Clark Co., Nev.

February 10, 1934

Caught in traps—
3 ♀ gophers
Put up specimens most of day.

February 11, 1934

Packed specimens in morning.
P.M. afternoon went with Orr to Hiko Spg. to set for gophers. Made 11 sets, and set 50 mouse traps at 2700 ft., 8 mi. S Dead Mtn., came back to camp the same night.

February 12, 1934.

Caught in traps—
3 Thomomys
5 Dipodomys merriami; 3♂♂, 2♀♀
7 Perognathus crinitus; 4♂♂, 3♀♀
4 " eremicus; all ♂♂
1 Neotoma lepida ♂

Traps were set about 50 ft. apart.
Shot 2 Ammospermophilus, one sage thrasher.

Tonight went up to trap for gophers again. Caught one during day.
Set 50 mouse traps in same locality as last night. Left gopher sets out.

Hatfield-1934

Colo. R., ½ mi. N Calif-Nev.
Monument, 500 ft., Clark Co., Nev.

February 13, 1934

Went up to look at gopher sets in morning.
Caught no gophers.
Caught in mouse traps -
4 Dipodomys merriami
1 Peromyscus eremicus

The gophers up in the mountains are fairly scarce, and apparently cover a great deal of territory, that is, individually. It would seem probable that the length of their runways is due to the scarcity of food. Leading to the same assumption is the notable fact that none of the gophers so far caught in the mountains has the slightest amount of fat. This lack is striking when one compares them with the valley form, having a great deal of fatty tissue.

Changed some sets, left others in same places.

The scarcity of mammals, as shown by last night's trapping results, seems to me to be due to the cold weather. The night before last was warm, and we caught many mice and rats. Last night was cold, and, though the trap-line was about 200 yards from that of the night before, and in the same type of environ-

Colo. R., ½ mi. N Calif.-Nev.
Monument, 500 ft., Clark Co., Nev.

Halfield-1934

February 13, 1934

went, we caught very little — ns Perognathus
Fitch and Feathers took over the gopher trapping in the afternoon, and brought back three gophers from our sets.

February 19, 1934

Fitch and Feathers went up after gophers while Orr and I packed up.
They came back with one gopher.
We packed up the truck and drove up to Hiko Spg. Got two more gophers, so left for Berkeley. Slept in Barstow.

February 15 1934

Drove from Barstow to Berkeley, arriving at M.V.Z. about 9:00 P.M.

Hatfield, D. M.

Oregon: Lake Co.

1935

DM Sept. 7, 1935 3 mi. N. Lakeview, Lake Co., Ore. (1)

Set 50 traps 3 mi. N. Lakeview, Lake Co., Ore., on a sagebrush-covered hillside. There were a good many signs of the presence of mice. 6 of the 50 traps were set in a rock-cliff formation near the summit of the hill. No woodrat sign noted.

Sept. 8, 1935

Caught in traps - 4 Peromyscus, 2 Perognathus.

♂ 701	Perognathus	182-100-24-9
♂ 702	"	150-82-22-10
♀ 703	Peromyscus	143-65-20-17

Acc 4771
Rec'd Dec 2, 1935

DMH 6 mi. W Lakeview, Lake Co., Ore (2)
Sept. 16, 1935—

Set 50 mouse traps and 10 gopher traps 6 mi. W Lakeview; in alkali flat amid sagebrush and a salt grass. Many Microtus runs noted, especially at the edge of the flat, which joined an alfalfa field.

Sept. 17, 1935—

Caught in traps – 6 Microtus, 1 Lagurus, 2 Reithrodontomys. It may be that the night are too cool for maximum activity of the mice. From the sign, I would have assumed that there were more mice present than is indicated by the trapping record.

♀ 704	Lagurus:	105-19-17-9
♀ 705	Microtus	170-37-18-14
♀ 706	"	170-46-20-19

DMH Sept. 17, 1935 — 6 mi. W Lakeview, Lake Co., Ore. (8)

♂ 707 Microtus — 178-46-20-13

♀ 708 " — skull only.

♂ 709 " — 137-34-20-12

♀ 710 " — 162-41-19-12

♀ 711 Reithrodontomys — 118-54-19-13

~~712~~

♂ 712 " — 136-66-18-14

Hunters Hot Springs 1 mi. N.
Lakeview, Lake Co., Ore.

August 2, 1935

? 713 Mephitis — skull only.

Alameda Co., Calif.
1933-1934

Hatfield, DM
1933-1934

Alameda Co., Calif.
Measurements pertaining to
Microtus specimens #271-524 DMH

M.c. californicus

1933 Dwight Way Hill, E end of Dwight Way, Berkeley, Alameda Co., Calif.

Feb. 25	271.- ♂	170-47-21-14 skin only	wt. 44.1 g.
	272.- ♂	177-48-20-14	wt. 51.8 g.
	273.- ♂	174-46-20-15	wt. 54.3 g.
	274.- ♀	166-41-20-15 5 emb. x 3 mm.	" 49.3 g.
Mar. 20	275.- ♀	168-44-21-14	" 47.4 g.
	276.- ♂	169-(41)-21-15	" 46.9 g.
	277.- ♀	164-42-20-14 4 emb. x 5 mm.	" 45.6 g.
	279.- ♂	175-47-21-15	" 50.3 g.
	280.- ♀	164-43-20-14	" 46.5 g.
	281.- ♀	164-45-22-14	" 43.8 g.
	283.- ♂	160-46-22-15 skin only	" 37.0 g.
Apr. 17	284.- ♀	158-41-20-14	" 36.8 g.
	285.- ♂	165-44-21-14 skin only	" 50.7 g.
	286.- ♂	150-39-20-15 skin only	" 32.8 g.
	287.- ♀	151-42-20-14	" 34.6 g.
	288.- ♂	158-46-21-15	" 32.5 g.
	289.- ♂	147-38-20-14	" 29.3 g.
	290.- ♂	148-39-21-14	" 26.7 g.

F_3/S_9	180-47-20-14	wt. 56 g. ♂
F_3/S_6	161-39-19-14	wt. 47.2 g. ♂
F_4/S_{11}	157-43-19-14	wt. 42.7 g. ♂
F_4/S_{14}	163-44-19-14 (sk.o.)	wt. 46.3 g. ♂
F_4/H_{16}	168-45-19-14	wt. 56.0 g. ♂
F_4/H_{17}	151-39-20-15	wt. 39.0 g. ♂

Skulls only

$F_3 H_{14}$ ♀ 150-45-20-14

$F_3 S_{10}$ ♀ 161-47-21-15

$F_4 S_{13}$ ♀ 159-47-20-14

H = Hill
S = Swamp
F_x = Filial generation.

W1 ♂ 183-43-21-15 wt: 75.3g.

H1 ♀ 182-52-22-11 no wt.

Microtus C. paludicola

½ mi. E Bay Farm Island, at Oakland City Limits, Alameda Co., Calif.

1933

Feb. 14	258.-♂	163-47-21-15	wt. 49.9 g.
Feb. 15	259.-♂	154-41-20-14	wt. 44.0 g.
	260.-♂	162-43-21-15	wt. 48.9 g.
Feb. 20	262.-♀	165-43-19-14	wt. 37.0 g.
	263.-♂	167-42-18-15	wt. 51.5 g.
	265.-♂	168-41-19-14	" 44.2 g.
	266.-♀	156-39-19-13	" 37.2 g.
	268.-♀	153-38-19-15	" 35.5 g.
	269.-♂	173-45-20-14	" 51.0 g.
	270.-♀	144-36-19-14	" 28.3 g.
Mar. 18	292.-♀	176-45-20-14	" 47.8 g.
	293.-♂	164-46-19-14	" 40.7 g.
Mar. 31	295.-♀	167-47-20-15	wt. 45.5 g.
	296.-♂	159-39-20-15	wt. 52.6 g.
	297.-♂	170-41-20-15	" 58.4 g.
	298.-♂	171-49-21-15	" 54.7 g.
	299.-♀	154-41-21-15	" 43.7 g.
	300.-♀	158-42-19-16	" 42.3 g.
	301.-♀	162-42-20-15	" 42.7 g.
	302.-♂	161-47-19-15	" 42.2 g.
	303.-♂	149-41-19-14	" 36.3 g.
	304.-♀	134-31-20-14	" 30.0 g.

1933

Mar. 31 (cont.)	305. — ♂	140-36-20-14	wt. 33.2 g.
	306. — ♀	138-31-20-13	" 28.8 g.
May 7.	307. — ♂	144-43-20-14	" 30.8 g.
	308. — ♂	134-36-20-14	" 26.8 g.
	309. — ♀	103-27-17-11	" 13.7 g.
	310. — ♂	102-27-18-11	" 11.9 g.

M. c. pallidicola

1934 Hayward Landing, 5½ mi. S. San Leandro, Alameda Co., Calif.

Sept. 15	517.- ♂	skull only
	~~518~~.- ♂	"
	519.- ♂	"
	520.- ♀	"
	521.- ♂	"
	522.- ♂	"

Alvarado, Alameda Co., Calif.

Sept. 15	523.- ♂	skull only
	524.- ♂	skull only.